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PUBLIC HEALTH SERVICE

IN REPLYING, ADDRESS THE

Communicable Disease Center
Enteric Bacteriology Laboratories
P. O. Box 185
Chamblee, Georgia

May 27, 1952

Dr. Joshua Lederberg
The University of Wisconsin
Department of Genetics
Madison 6, Wisconsin

Dear Dr. Lederberg:

Thank you very much for your letter of May 21 and the information contained therein. You will note that culture SW 563 which you sent us was identified as S. dublin. This is not surprising and is quite what should have been expected. At the time I sent culture 1520-51 to you, I had not taken the trouble to look up the source of the strain. Upon going over the records, I find that this was one of a group of nonmotile group D cultures which were received from Guatemala. The cultures were isolated from calves and while they could not be typed on account of nonmotility, their biochemical reactions indicated that they were S. dublin. I am very glad that you have been able to transform the culture to a motile state so that this conclusion could be verified.

Your remarks regarding the group B nonmotile cultures which we sent you were noted with interest. I am rather surprised to learn that you obtain motile variants of 117-51 without your FA. This culture was not transferred repeatedly in semisolid in our laboratory but it showed no evidence of motility when placed in that medium.

I would attach no significance to the isolation of motile forms from S. typhi 0901. Our difficulty with this strain is to keep it in a nonmotile condition. When placed in semisolid agar it develops motile variants very readily. Other workers have had the same difficulty with this culture.

The results which you obtained with the nonmotile form of Kauffmann are most interesting. I did not quite understand just what you have done with this culture. As I interpret your remark, the i phase has been isolated from a supposedly nonmotile S. paratyphi B without the use of FA. I presume this was done with the help of b serum and semisolid agar. This is rather surprising since we have never seen an i phase come from a monophasic S. paratyphi B. When phases are forced from such cultures they almost

invariably turn out to be an induced phase called z_{33}. Occasionally from a java culture one can isolate a normal phase 2 but this is unusual. As would be expected such phase 2 cultures are just as stubbornly monophasic as was the b phase.

I believe I need not tell you that we are very interested in the work which you are doing and will be more than glad to help you in any way possible.

For the Officer-in-Charge, Bacteriology Section

Sincerely yours,

P. R. Edwards

PRE:mg

Philip R. Edwards, Ph. D.
Bacteriologist-in-Charge
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